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(54) Title: **METHOD FOR ASSAYING REPLICATION OF HBV AND TESTING SUSCEPTIBILITY TO DRUGS**

(57) Abstract: A method for measuring the replication capacity of HBV, e.g. HBV present in a biological sample, possibly in the presence of a pharmaceutical product, in particular an antiviral agent, the method comprising: (a) possibly extracting nucleic acids contained in the biological sample; (b) PCR amplifying HBV nucleic acids using at least two primer pairs selected so as to obtain at least two different amplified HBV genomic fragments which upon assembly represent a linear continuous DNA sequence transcribable in pgRNA; (c) cloning the fragments obtained under (b) into a vector under the control of an heterologous promoter, so producing a vector containing a linear continuous DNA sequence transcribable in pgRNA under control of said promoter; (d) transfecting or transducing susceptible cells with the vector; (e) culturing the transfected or transduced cells in conditions allowing synthesis of HBV pgRNA from the cloned HBV DNA; (f) possibly treating the cultured cells with the pharmaceutical product, in particular antiviral agent; and (g) determining the replication capacity of the HBV, possibly incidence of the pharmaceutical product, preferably antiviral agent, on viral gene expression and/or viral replication.



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